

Application No. 09/808,224
Filed: March 14, 2001
Group Art Unit: 1645
Confirmation No.: 2803

REMARKS

The Abstract of the application is objected to because it exceeds one paragraph. Similarly, the specification is objected to for informalities and for not including a complete priority statement.

Pending claims 1-15 have been rejected for obviousness-type double patenting as being unpatentable over claims 1-17 of U.S. Patent No. 6,150,173. Claims 1-15 have also been provisionally rejected for obviousness-type double patenting as being unpatentable over claims 1-12 of copending Application No. 09/808,225.

Claims 1-15 are further rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Claims 1, 2, 4, 5 and 15 are amended herein and support for the amendments can be found throughout the specification and claims as originally filed. The amendments made herein are further explained below. No new matter has been added.

Any amendments to the claims should in no way be construed as acquiescence to any of the Examiner's rejections and was done solely to expedite the prosecution of the application. Applicant reserves the rights to pursue the claims as originally filed in this or a separate application(s).

Applicant respectfully requests reconsideration and withdrawal of the Examiner's objections and rejections in view of the above amendments and the remarks herein.

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General Objections

The Examiner objected to the Abstract of the application because it exceeded one paragraph. Applicant has amended the Abstract to comply with the Examiner's objection and submits that the objection has been overcome.

The Examiner also objected to page 1 of the specification because it includes a sticker with an express mail number. Applicant acknowledges that the sticker is included on page 1, although such is common practice in the filing of a U.S. patent application. With deference to this practice, Applicant respectfully requests that the Examiner reconsider and withdraw the objection.

The Examiner further indicated that the application did not include a complete priority statement. Applicant appreciates the Examiner's comment and Applicant has inserted a complete statement of priority in the application.

Claim Rejections - Obviousness-Type Double Patenting

Claims 1-15 are rejected for obviousness-type double patenting over claims 1-17 of U.S. Patent No. 6,150,173. Claims 1-15 have also been provisionally rejected for obviousness-type double patenting over claims 1-12 of copending Application No. 09/808,225.

Applicant respectfully traverses the foregoing rejections. Applicant contends that claims 1-15 are not obvious over U.S. Patent No. 6,150,173 or Application No. 09/808,225. In turning first to U.S. Patent No. 6,150,173, the Examiner has not demonstrated that all of the elements for a *prima facie* case of obviousness are disclosed in the reference. For example, step (f) of claim 1 discloses that at least one difference between

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the combination patterns of two different objects is determined. As claimed, step (g) of claim 1 identifies at least one reagent solution whose marker pattern causes the difference determined in step (f). Thus, Applicant's identified reagent solution contains marking molecules that bind to the very molecules or molecular complexes that cause the difference between the combination patterns of the different objects. This identification process is not obvious in view of U.S. Patent No. 6,150,173 such that an obviousness-type double patenting rejection would be proper.

Additionally, step (i) of claim 1 relates to a biochemical characterization of the selected molecules or molecular complexes. This characterization step includes biochemical methods such as spectroscopic methods, ion-exchange chromatography, gel filtration, electrophoresis, affinity chromatography, immunochemistry, sequencing or the like. These biochemical methods are not disclosed in nor would they be obvious in view of U.S. Patent No. 6,150,173, particularly as the reference is directed to identifying and summarizing marking patterns in a complex molecular combination pattern of an object. Furthermore, the prior art method of identifying and summarizing marking patterns occurs in a natural molecular environment, whereas biochemical characterization, as recited by Applicant, does not occur in such an environment.

The method claimed by Applicant also provides that cell-specific target structures can be identified that clearly distinguish cell and tissue samples from other cell and tissue samples. U.S. Patent No. 6,150,173, however, merely allows for conclusions as to where the molecules bound by the marking molecules are located. Therefore, it cannot be concluded from

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the reference which function the individual marking molecules of an object have based on the resulting marking distribution pattern of the object. Given that the reference does not teach or suggest identifying cell-specific target structures, it would not be obvious to one of ordinary skill to perform the method recited by Applicant.

Now, turning to Application No. 09/808,225, it is understood that this reference is directed in part to identifying cell-specific target structures. Claim 1, however, recites a detailed method for identifying cell-specific target structures. The specificity in which this method is claimed is not taught or suggested in Application No. 09/808,225 as this reference generally discloses identifying and enriching target structures. For one skilled in the art, it would not be obvious in view of the reference to claim a method for identifying cell-specific target structures with the detail recited by Applicant's claims. Applicant's explicit recitation of a method for identifying target structures clearly distinguishes claim 1 from the reference.

In view of the foregoing arguments, Applicant respectfully requests reconsideration and withdrawal of the obvious-type double patenting rejections of claims 1-15.

Claim Rejections - 35 U.S.C. § 112, 2nd Paragraph

Claims 1-15 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite.

Applicant respectfully traverses the foregoing rejection. Nonetheless, claim 1 has been amended to clarify the recitation "each containing said at least one marker molecule and/or at least another marker molecule." Claim 5 is also amended to

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clarify the recitation of "after step (x): (y) examining at least one protein and/or at least one protein modification."

Although claim 1 is rejected for not clearly identifying the metes and bounds of Y_n ($n = 2, 3, \dots, N$) and X_n ($n = 2, 3, \dots, N$), Applicant respectfully disagrees with the Examiner's argument. It is generally understood that $n = 2, 3, \dots, N$ recites a sequential group of numbers which, in claim 1, are identifiers. Specifically, Y_n and X_n identify different reagent solutions and objects, respectfully. A person of ordinary skill in the art would consider this claim language as definite as the nomenclature allows one to distinguish between different solutions and objects.

Based on the foregoing amendments and arguments, Applicant respectfully requests reconsideration and withdrawal of the rejection of claims 1-15 for indefiniteness.

Applicant submits that all claims in the application are in condition for allowance and such action is requested.

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The Examiner is encouraged to telephone the undersigned attorney to discuss any matter that would expedite allowance of the present application.

Respectfully submitted,

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